ISO Standard Retrievable Bridge Plug

Creates a V3-qualified barrier for isolating the wellbore without the need of a nipple profile or complex setting tools

Applications

- Shallow-set barriers for tree maintenance
- Contingent plugging of completions with damaged nipples
- Zonal isolation, water and gas shutoff
- Data acquisition near a producing interval
- Temporary well suspension

Features and Benefits

- With slickline as its primary deployment method, the bridge plug offers both an operationally efficient and cost-efficient well barrier solution.
- This plug is available in 2 3/8- to 7-in. nominal sizes so that all routinely encountered tubing sizes can be serviced from standard inventory.
- The plug is set without the use of pyrotechnics, which eliminates the need for radio silence and the interruption of other production operations.
- The minimum pressure rating of 5,000 psi (34.47 MPa) from above and below provides high-integrity sealing and minimizes loss-of-containment risk and associated health, safety, and environmental (HSE) exposure. Higher-pressure ratings are available on request.
- The plug can be set reliably on electric line, coiled tubing, or drillpipe as an effective plug in high-angle, extended-reach, and other applications that preclude the use of slickline.
- Designed to be easily re-dressed in the field without the need for specialized tooling, the plug is well suited for use in remote locations.

Tool Description

The ISO retrievable bridge plug is run on a conventional slickline tool string. In the running position, both sets of slips are retracted. Once lowered close to setting depth, the plug is picked up. Lowering the plug again sets the lower slips, and picking up the plug retracts the slips. Thus, the plug can be repeatedly picked up and set down to determine depth correlation.

Once the lower slips have been expanded, downward jarring sets the upper slips. With the upper slips set, upward jarring shears the load transfer sleeve so that the jarring force is then used to pack off the element. Continued upward jarring fully energizes the element. Finally, the running tool is sheared off the plug, and the set plug can be tested.

The ISO standard retrievable bridge plug provides a mechanical slickline-deployed well barrier solution that is flexible and adaptable in its application.

Weatherford®

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Tool Description Continued

Retrieval of the plug with a standard GS-type pulling tool and pulling probe requires light downward jarring to achieve collapse of the element and retraction of the upper slips. Some time is allowed for the element to relax before pulling out of hole.

Specifications

Casing/Tubing			Max. OD	To Pass Restriction	Length C/W Running Tool
Size	Weight	ID Range			
2-3/8 in. (60.32 mm)	4.6 to 5.8 lb/ft (6.85 to 8.63 kg/m)	1.87 to 1.99 in. (47.49 to 50.67 mm)	1.76 in. (44.70 mm)	1.79 in. (45.46 mm)	95 in. (2,413 mm)
2-7/8 in. (73 mm)	4.6 to 5.8 lb/ft (6.85 to 8.63 kg/m)	2.32 to 2.44 in. (58.93-61.98 mm)	2.20 in. (55.88 mm)	2.23 in. (76.20 mm)	88 in. (2,235.20 mm)
3-1/2 in. (88.9 mm)	9.2 to 10.2 lb/ft (13.7 to 15.17 kg/m)	2.99 in. (75.94 mm)	2.72 in. (69.09 mm)	2.75 in. (69.85 mm)	111 in. (2,819.40 mm)
4 in. (101.60 mm)	9.5 to 11.0 lb/ft (14.14 to 16.37 kg/m)	3.47 to 3.55 in. (88.14-90.17 mm)	3.25 in. (82.55 mm)	3.28 in. (83.31 mm)	130 in. (3,302 mm)
4-1/2 in. (114.3 mm)	11.6 to 15.1 lb/ft (17.3 to 22.5 kg/m)	3.83 to 4.00 in. (97.28 to 101.60 mm)	3.60 in. (91.44 mm)	3.63 in. (92.20 mm)	117 in. (2,971.80 mm)
5 in. (127 mm)	15 to 21.40 in. (381 to 543.56 mm)	4.13 to 4.41 in. (104.90 to 112.01 mm)	4.05 in. (102.87 mm)	4.08 in. (203.20 mm)	128 in. (3,251.20 mm)
5-1/2 in. (139.7 mm)	17 lb/ft (25.29 kg/m)	4.89 in. (127.21 mm)	4.53 in. (115.06 mm)	4.56 in. (115.87 mm)	155 in. (3,937 mm)
	20 to 23 lb/ft (29.76 to 34.22 kg/m)	4.67 to 4.78 in. (118.62 to 121.41 mm)	4.46 in. (113.28 mm)	4.49 in. (114.05 mm)	
6-5/8 in. (168.40 mm)	20 to 24 lb/ft (29.76 to 35.72 kg/m)	5.92 to 6.05 in. (150.37 to 153.67 mm)	5.65 in. (143.51 mm)	5.68 in. (203.20 mm)	147 in. (3,733.80 mm)
7 in. (177.8 mm)	23 to 26 lb/ft (34.23 to 38.69 kg/m)	6.28 to 6.37 in. (159.51 to 161.79 mm)	5.93 in. (150.62 mm)	5.96 in. (151.38 mm)	147 in. (3,733.80 mm)
	29 to 32 lb/ft (43.16 to 47.62 kg/m)	6.09 to 6.18 in. (154.68 to 156.97 mm)	5.72 in. (145.29 mm)	5.75 in. (146.05 mm)	
	35 to 38 lb/ft (52.08 to 56.55 kg/m)	5.92 to 6.00 in. (150.36 to 152.40 mm)	5.65 in. (143.51 mm)	5.68 in. (144.27 mm)	

*Tested and qualified to 320°F (160° C); higher temperature options are available upon request.

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